

Onslow County Natural Area Inventory Site Report

NORTH TOPSAIL BEACH MARITIME FOREST

Site significance: regional

Quadrangle: Spicer Bay

Size: about 100 acres

Ownership: private

SIGNIFICANT FEATURES: The site contains a small but very good example of the Maritime Evergreen Forest natural community. This community type has become increasingly rare due to the commercial and residential development of coastal barrier beaches. The Maritime Shrub and Interdune Pond natural communities are also present. North Topsail Beach Maritime Forest supports a population of sunrise lichen (*Teloschistes flavicans*), which is listed by NC NHP as significantly rare. It is not known from any other site in Onslow County.

LANDSCAPE RELATIONSHIPS: North Topsail Beach Maritime Forest is located northwest of highway NC 210 from about one-half to one mile southwest of the bridge over the Intracoastal Waterway. It is directly connected to a narrow but lengthy tidal marsh, creek, and bay system that extends northeastward to Alligator Bay Marshes and Forests natural area, Chadwick Bay, New River Inlet natural area, and Camp Lejeune. Southwestward, it is connected to Stump Sound. Adjacent barrier beach areas are undergoing extensive residential and commercial development.

SITE DESCRIPTION: North Topsail Beach Maritime Forest comprises forested upland flats and small dunes between highway NC 210 and marshes along the backside of Topsail Island. The site is about 0.6 mile long and 0.1 mile wide, and supports the Maritime Evergreen Forest, Maritime Shrub, and Interdune Pond community types. Maritime Evergreen Forest is the dominant community type, with primary habitat located at the northeast and southwest ends of the site. The northeast segment comprises about 17 acres on an upland flat, and the southwest segment comprises about 13 acres on small dunes. A narrow low woodland composed primarily of the Maritime Shrub community type connects the two segments of Maritime Evergreen Forest. A small depression within the northeast segment of the Maritime Evergreen Forest supports the Interdune Pond community type. The site is bordered by residential development, cleared land, and/or roadway along the northeast, southeast, and southwest, and by extensively ditched marshes along the northwest.

The Maritime Evergreen Forest community is characterized by a mature canopy in very good condition dominated by live oak (*Quercus virginiana*) 20-30 feet high. Red bay (*Persea palustris*) is the dominant subcanopy tree, while yaupon (*Ilex vomitoria*) and wax-myrtle (*Myrica cerifera*) are dominant in the open to moderate shrub layer. Herbs are sparse, with marsh fern (*Thelypteris palustris*) forming patches in low spots. Poison ivy (*Toxicodendron radicans*) and muscadine grape (*Vitis rotundifolia*) are prominent vines. The Maritime Shrub community is dominated by a dense low canopy (to 15 feet) of live oak and red cedar (*Juniperus virginiana*), with wax-myrtle forming a dense shrub layer. Both the Maritime Evergreen Forest and Maritime Shrub communities are protected on the southeast (oceanic) side by a wind-pruned thicket of dense shrub growth. The Interdune Pond community is dominated by longhair sedge (*Carex comosa*) and softstem bulrush (*Schoenoplectus tabernaemontani*) in the seasonally flooded central portion of